



FACULTY DEVELOPMENT PROGRAMME (FDP)  
ON  
**ADVANCED COMPILER DESIGN**  
(June 2, 2017 to June 11, 2017)



Organized by GITAM University, Hyderabad in association with NIT, Warangal  
Under the scheme of Electronics & ICT Academy  
(Sponsored by Department of Electronics and Information Technology (DeitY), GOI)

**Preamble:**

“Electronics & ICT Academy” is being set up at NIT Warangal with financial assistance from DeitY, MCIT, Gol. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka States and Pudicherry, Andaman & Nicobar Islands and Goa UTs. This academy role is to offer faculty development programs in standardized courses and emerging areas of Electronics, Information Communication Technologies; training & consultancy services for Industry; Curriculum development for Industry; CEP for working professionals; Advice and support for technical incubation and entrepreneurial activities.

As part of this initiative, a Faculty Development Programme (FDP) on Advanced Compiler Design is being conducted to the Faculty members of engineering, MCA and other allied degree colleges.

**Major Course Contents:**

This course consists of following topics.

- Lexical Analysis
- Top Down Parsing and Bottom Up Parsing
- Lex and Yacc
- Semantic Analysis - Syntax Directed Translation
- Intermediate Code Generation, Basic Optimizations
- Code Generation, Optimization of Basic Blocks, Register Allocation
- Machine Independent Optimizations
  - Global Common Subexpression Elimination
  - Copy Propagation
  - Dead Code Elimination
  - Induction variable Optimizations
  - Loop optimizations
- Machine Dependent Optimizations
  - Instruction Scheduling
  - Control Flow and Low Level Optimizations
- Interpreter/Compiler for Subset C-Language

**Organized at:**

The programme will be coordinated and conducted by Department of Computer Science and Engineering, GST, GITAM University, Hyderabad. The whole course is handled by senior faculties of NIT/IIIT.

**Eligibility:** The programme is open to the *teachers of engineering colleges, MCA/BCA degree colleges and other allied disciplines* in Telangana, Andhra Pradesh, Karnataka states and Pudicherry, Andaman and Nicobar Islands and Goa UTs. Industry and other working professionals are also eligible.

**Pre-Requisites:** Basic knowledge on Theory of Computation, Data Structures and C-Programming is needed.

**Registration Fee Particulars:**

Faculty members and Research Scholars from the above mentioned states: Rs. 3,000/-

Industry participants: Rs. 9000/-

Faculty members and Research Scholars from other states 12500/-

Faculty members from SC/ST Category of above mentioned states: Rs.750/-

The participants need to send a crossed demand draft (DD) drawn in favour of “Director, NIT Warangal” and payable at SBH, NIT Warangal branch.

**How to apply:**

A filled-in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with demand draft) should reach the coordinator on or before the last date by post/courier. Participants are requested to write their name and contact number backside of demand draft. It is also mandatory to send scanned application form and demand draft through e-mail to [sreedharreddy.gogu@gitam.edu](mailto:sreedharreddy.gogu@gitam.edu) as selection will be intimated only through e-mail.

**Selection Criteria:**

Selection will be done based on *first-come-first-serve basis* and the confirmed candidates will be notified by email. The maximum number of participants will be **50 (fifty)**. Additionally 10 participants from industry are allowed to participate. **The list of selected participants will be intimated through e-mail.** In case a candidate is not selected, the demand draft will be sent back. Candidates will be issued certificates on successful completion of the course along with grade. Reservations of seats are followed for selecting candidates as per GOI norms.

**Important dates:**

Last date to receive application & Demand Draft: **May 20, 2017.**

Selection-list intimation by email: **May 27, 2017.** Duration of Program: **June 2, 2017 to June 11, 2017 (10 days).**

**About the GITAM University and department:**

GITAM is a premier Deemed to be University in the country, having 36 years of track record in teaching and research of global standards with diverse disciplines such as Technology, Pharmacy, Science, Management, Humanities, International Business, Architecture, Law and Medicine. Over the years, the University has established state-of-the-art infrastructure comprising well laid-out, elegantly designed and engineered buildings for administration, academic departments and central facilities at the three campuses. The NAAC accredited GITAM University with 'A+' Grade, the UGC recognized as Research University and many more such rewards and

awards to the credit of GITAM University. The Department of Computer Science and Engineering at GITAM School of Technology, Hyderabad was established in 2009 to act as a Promoter, Facilitator in the field of Computer Science and Engineering. The department offers B.Tech., M.Tech. & Ph.D Programmes. Department conducts various courses to keep pace with dynamics of change by teaming up with various reputed institutions and industries.

**Address for correspondence:**

Post your Application form along with DD to  
The Co-ordinator

**Mr. G. Sridhar Reddy,**  
**Asst. Professor,**  
**Department of Computer Science and Engineering,**  
**GITAM School of Technology,**  
**GITAM University,**  
**Hyderabad - 502 329,**  
**Telangana, India.**

E-mail the scanned copies of filled-in and duly signed application form along with DD to  
sreedharreddy.gogu@gitam.edu

For more details about Electronics and ICT academy please visit: <http://nitw.ac.in/eict/>

**For any enquiry please contact:**

**Tel.: 08455-221297, 9959413341**

**Email: sreedharreddy.gogu@gitam.edu**

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**Coordinators:**

**Dr. Chapram Sudhakar, Associate Professor,**  
**CSE, NIT, Warangal - 506 004**

**Mr. G. Sridhar Reddy,**  
**Asst. Professor, Dept. of CSE,**  
**GITAM School of Technology, GITAM**  
**University, Hyderabad - 502 329**

FORMAT OF APPLICATION

*Electronics and ICT Academy*  
Faculty Development Programme  
on  
Advanced Compiler Design  
(2<sup>th</sup> June – 11<sup>th</sup> June, 2017)

1. Name :
2. Gender: Male / Female
3. Designation:
4. Institution:
5. E-mail:
6. DD No:                      Bank :                      Date :
7. Address for Correspondence:

8. Educational Qualifications with Specialization:
9. Subjects taught so far:
10. No. of refresher courses/workshops attended:
11. Experience (in years)  
Teaching :  
Research :  
Industry :  
12. Accommodation required : YES / NO  
13. Are you belong to SC/ST : YES / NO

**Declaration**

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Place:

Date:    Signature of the applicant

**SPONSORSHIP CERTIFICATE**

Dr./Mr./Ms. .... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on **Advanced Compiler Design** sponsored by **Electronics & ICT Academy** during June 2, 2017 to June 11, 2017 at **GITAM University, Hyderabad-502 329, Telangana.**

Place:

Date:

Signature of Head of Institution  
(with seal)

**Address for correspondence**

*Post your application form with DD to*

**Mr. G. Sridhar Reddy,**  
**Asst. Professor**  
**Department of Computer Science and Engineering,**  
**GITAM School of Technology,**  
**GITAM University, Hyderabad Campus,**  
**Rudraram - 502 329, Patancheru Mandal,**  
**Sangareddy District, Telangana.**

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For more information visit: <http://nitw.ac.in/eict/>

For any enquiry contact:

Tel.: 08455-221297, 9959413341

**Coordinators**

**Dr. Chapram Sudhakar &**

**Mr. G. Sridhar Reddy**

**Organized by**

**Electronics & ICT Academy and**

**GITAM University, Hyderabad &**

**NATIONAL INSTITUTE OF TECHNOLOGY, WARANGAL**